

Suicide In Indiana

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The newly established Injury Prevention Program at the Indiana State Department of Health (ISDH) presents the following excerpts from a newly released 24-page report on Suicide in Indiana, 1999-2001, based on the most recent mortality and morbidity data available.

Overview

Mortality due to suicide accounts for approximately 30,000 lives in the United States each year. More than 264,000 Americans are treated annually in U.S. hospital emergency departments after attempting to take their own lives. Still, many suicides or suicide attempts go unreported, making the magnitude of the problem far greater than what current statistics demonstrate. **Eighty-four people commit suicide each day in the United States.**

Prior to 1998, suicide ranked in the top ten leading causes of death in the U.S. Suicide now ranks as the 11th cause of death in both the U.S and in Indiana. There have been minimal changes in its ranking when considering specific age groups.

Suicide in the United States

Suicide is the eleventh leading cause of death for all Americans, the second leading cause of death for young adults age 25-34 years, and the third leading cause of death for those 10-24 years of age. In 2000, suicide accounted for 29,350 deaths, a rate of 10.7 per 100,000-population (1). Mortality due to suicide is generally higher than the national average in the western states and lower in the eastern and mid-western states (2). Suicide rates increase with age and are highest among Americans 65 years and older, especially those who are divorced or widowed. The

HIGHLIGHTS:

- In 2001, 706 Hoosiers committed suicide. Suicide ranked as one of the five leading causes of death for all persons age 15-54. For Hoosiers age 10-24, suicide ranked as the 3rd leading cause of death and accounted for 13% of all injury deaths in this age group.
- From 1999-2000, suicide was the 2nd leading cause of INJURY deaths in Indiana, accounting for 20% of all injuries.
- Compared to the national average, suicide rates in Indiana are higher for all age groups, except for senior citizens.
- Hoosiers age 10-24 commit suicide more often when compared to 10-24 year olds in the United States and all regions in the U.S.
- During the period 1999-2000, male Hoosiers had suicide rates 4-6 times those of females.
- Black male Hoosiers age 20-24 have a higher rate of suicide compared to all other age groups.
- Suicide rates are considerably lower for female Hoosiers. From 1999-2000, females age 40-49 committed suicide at a rate of 8.13 per 100,000 population, the highest rates for females regardless of age.
- The use of firearms accounted for 60% of all suicides in Indiana.
- According to the 2001 Youth Risk Behavioral Survey results for Indiana's 9th through 12 graders, 22.6% of females and 13.3% of males seriously considered attempting suicide during the past twelve months; 18.6% of females and 13.5% of males had a plan and 11.2% of females and 5.2% of males actually attempted suicide one or more times.
- From January 2002 to June 2002, 913 Hoosiers age 12-91 were hospitalized as a result of self-inflicted injuries specified as intentional, (i. e., attempting to commit suicide). Eighty-four percent of these hospital admissions involved white males and females.
- Ninety-two percent of people hospitalized for a suicide attempt in the first 6 months of 2002 involved self-inflicted poisoning by solid or liquid substances. The most frequent poisoning diagnoses requiring hospitalization resulted from ingestion of tranquilizers (34%) followed by the category of analgesics, antipyretics, and antirheumatics (23%).

Centers for Disease Control and Prevention (CDC) reports that **on average, an older adult commits suicide every 90 minutes in the United States**. Men in this age group have the highest rate. Risk factors associated with this higher incidence of suicide include but are not limited to depression, mental illness, and chronic disease. It is believed that men are less likely to ask for help, especially help for emotional concerns. This factor may contribute to the increased risk of suicide death in this category. In nearly all cases, men 65 and older who commit suicide suffer from depression and become more socially isolated and vulnerable to suicide (3).

Males are four times more likely to die from suicide than females, however females are more likely to attempt suicide than males. White males and white females are known to attempt suicide at higher rates than other races; together they accounted for over 90% of all suicides in 1999 (2). Males attempting suicide are also more likely to use lethal means, such as guns, which makes them at least four times more likely than females to die from suicide (3).

Nearly 3 of every 5 suicides were committed with a firearm. From 1999-2000, there were a total of 92,960 violence-related injury deaths. Over a third of these (39.4%) resulted from males who committed suicide with the use of a firearm – the number one mechanism regardless of age. In addition, suicide deaths by firearm were the leading cause of violence related injury deaths for males 35 years of age and older, the second leading cause for males 15-34 and the third leading cause for males 10-14 (1).

Persons under age 25 accounted for 14% of all suicides. Teens and young adults are involved in violence more often than any other age group. At this developmental stage, they may act impulsively and frequently engage in risk-taking behavior. Peer pressure in this group also increases the likelihood for involvement with substance abuse, delinquent peers and attempting personal violence, contributing factors for suicide and suicidal behavior in this age group. (3) **In 1999, more teenagers and young adults died from suicide than from cancer, heart disease, AIDS, birth defects, stroke, and chronic lung disease combined** (2).

Suicide in Indiana

From 1999-2000, 6,689 Hoosiers died from injuries, **an average of nine people each day**. While 67% of the injury deaths were unintentional (accidental), 20% of these deaths resulted from suicide and 11% from homicide (Figure 1). Results from the 2001 Adolescent and School Health report ranked suicide as the third leading cause of death for Hoosiers ages 10-24 years, accounting for 13% of all deaths in Indiana.

When reviewing suicide deaths among Hoosiers by race, gender and age, there are more suicide deaths among white males in all categories (Figure 2). However, **black male Hoosiers, age 20-24 have a higher rate of suicide when compared to all other age groups (Figure 3)**.

According to the 2001 Indiana Mortality Report, suicide ranked as one of the five leading causes of death for the Hoosiers age 15-54. During this same period, mortality due to suicide took the lives of 706 Hoosiers at a rate of 11.66 per 100,000 population. Males accounted for 80% (565) of all suicides, of which 94% (533) were white men. Overall, females committed suicide less often than males, and white females, who represented 20% (141) of all suicides, did so more often than black females.

Data On Suicide In Indiana

Table 1: Comparison of Suicide Rates During 1999-2000

Age in years	Indiana		United States		Northeast		South		West		Midwest	
	Deaths	Crude Rate	Deaths	Crude Rate	Deaths	Crude Rate	Deaths	Crude Rate	Deaths	Crude Rate	Deaths	Crude Rate
10-24	215	8.4	8,437	7.3	1,121	5.54	3,155	7.68	2,068	7.68	2,093	7.66
25-64	882	14.2	39,285	13.77	5,819	10.55	15,231	15.06	9,703	15.25	8,532	13.03
65+	214	14.39	10,818	15.61	1,452	9.9	4,225	17.34	2,908	20.97	2,233	13.61

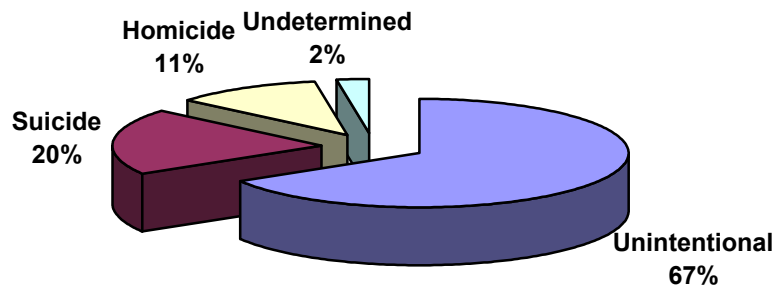
Rates are per 100,000 population.

(Source: CDC, WISQUARS)

Compared to the national average, suicide rates in Indiana are higher for all age groups, except for senior citizens. Hoosiers ages 10-24 years commit suicide more often when compared to the same age group nationwide. (Table 1).

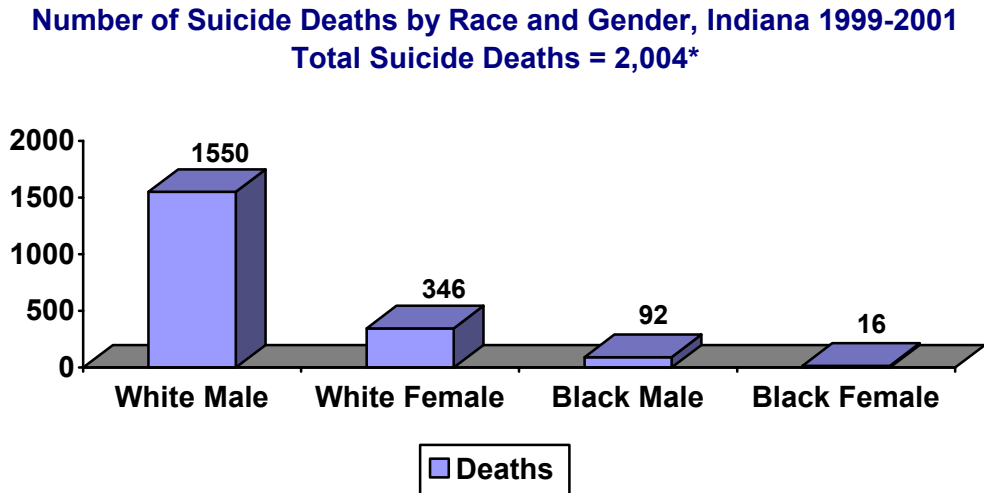
Figure 1: Suicide as the second leading cause of injury death among Hoosiers.

Percent of Injury Deaths According to Intent, Indiana 1999-2000
Total Injury Deaths = 6,689



(Source: CDC, WISQUARS)

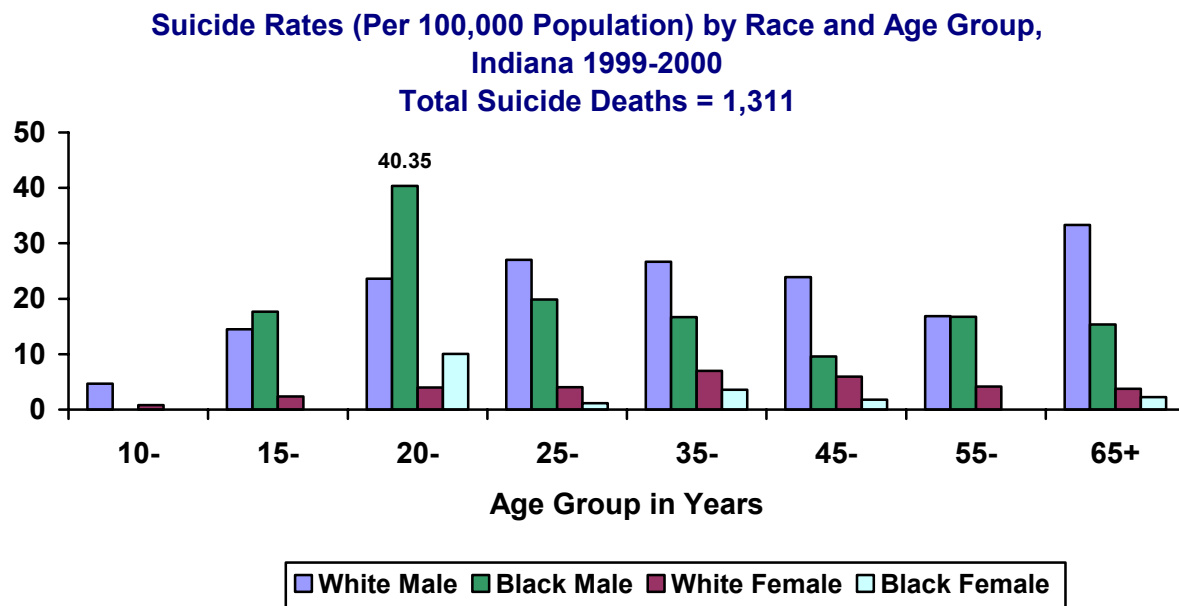
Figure 2: Suicide deaths: 16.8 ratio of White males to Black males



(Source: CDC, WISQUARS and 2001 Indiana Mortality Report)

*Data include number of deaths from 1999-2000 (WISQUARS) and the 2001 Indiana Mortality Report.

Figure 3: Higher rate of suicides among Black males age 20-24 years



(Source: CDC, WISQUARS)

Youth Risk Behavior Surveillance System Data

The Youth Risk Behavior Surveillance System (YRBSS), established by the CDC, monitors the prevalence of youth behaviors impacting health. Its focus is on risky behaviors that would have an adverse effect both physically and socially among youths and young adults. The result of the 2001 national school-based Youth Risk Behavior Survey for Indiana (unweighted data) indicates that 18.4% of 9th through 12th grade Hoosiers (22.6% of males, 13.3% of females) seriously considered attempting suicide during the past twelve months. Sixteen percent (13.5% of males, 18.6% of females) of the students had a plan for how they would attempt suicide, and 8.6% (5.2% of males, 11.2% of females) of the students actually attempted suicide one or more times during the past twelve months. Because data presented in the YRBSS report for the United States is weighted, comparisons cannot be made with Indiana.

Hospital Discharge Data On Suicide Attempts

The first two quarters of the Indiana 2002 hospital discharge dataset totaled 361,823 records. Of these, 14,902 had a principle diagnosis for injury and poisoning (ICD-9-CM codes 800-999). Six-percent (913) represented patients with self-inflicted injuries specified as intentional. The average age was 35 (range: 12 to 91). Eighty-four percent of the attempts were made by persons of the white race, involving 60% females and 40% males. The majority (227 or 25%) of the injuries were among white females age 25-44 years.

Prevention Strategies

This report demonstrates that suicide is a problem at both the local and national level. Prevention strategies can be developed when populations at risk are identified. We see in this report that male Hoosiers are the primary victims of suicide, while females may suffer suicide-related injuries as a result of their attempts.

- In 1999, the Surgeon General's Call to Action to Prevent Suicide outlined suicide prevention strategies grouped under the "umbrella" term **AIM (Awareness, Intervention and Methodology)**.
- **Awareness** seeks to appropriately broaden the public's awareness of suicide and its risk factors.
- **Intervention** refers to the enhancement of necessary services and programs.
- **Methodology** refers to advancing the science of suicide prevention. Suicide has been identified as a major public health issue and the Surgeon General has called for a public health approach to address it.

There are a number of tools that can be used to assess depression and the potential for suicide, such as questionnaires that are readily available to mental health professionals, counselors and health care providers. The availability of crisis intervention services, hotlines, and easy access to mental health providers can impact the problem of suicide in Indiana. All communities should become aware of what can be accomplished to prevent suicide in their locale.

For information on the Indiana Suicide Prevention Coalition, please contact one of the Co-Chairs, Kathleen O'Connell (okonell@ipfw.edu) or Charlene Graves (cgraves@isdh.state.in.us). For information on the Injury Prevention Program at the Indiana State Department of Health, please contact Dr. Charlene Graves, Principle Investigator for the Core Injury Surveillance and Program Development Cooperative Agreement (#U17/CCU522371) funded by the National Center for Injury Prevention and Control (NCIPC) at the Centers for Disease Control and Prevention (CDC).

References

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